**Application**

This cable is used for interconnection of the distribution boxes and end devices. The cable is very suitable for various indoor and outdoor applications, including routing between buildings within ducts and inside building up to riser shafts.

**Description**

The Distribution Cable consists of color-coded PVC tight buffered fibers. The fibers are reinforced with aramid yarn for superior strength and contains no metallic elements. The fibers are jacketed with Flame Retardant PVC or LSZH compound.

**Physical Properties**

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Nominal Weight (kg/km)</th>
<th>Nominal Weight (lb/kft)</th>
<th>Nominal Outer Diameter (mm)</th>
<th>Nominal Outer Diameter (in)</th>
<th>Maximum Pulling Load Installation (N/lb)</th>
<th>Maximum Pulling Load In Service (N/lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-6</td>
<td>26.0</td>
<td>17.45</td>
<td>5.0</td>
<td>0.197</td>
<td>1000/225</td>
<td>290/65</td>
</tr>
<tr>
<td>8-12</td>
<td>50.0</td>
<td>33.56</td>
<td>7.5</td>
<td>0.296</td>
<td>1425/320</td>
<td>500/112</td>
</tr>
<tr>
<td>14-24</td>
<td>140.0</td>
<td>93.96</td>
<td>13.0</td>
<td>0.512</td>
<td>2670/600</td>
<td>890/200</td>
</tr>
<tr>
<td>26-36</td>
<td>200.0</td>
<td>134.23</td>
<td>16.5</td>
<td>0.650</td>
<td>4448/1000</td>
<td>1490/335</td>
</tr>
<tr>
<td>38-48</td>
<td>300.0</td>
<td>201.34</td>
<td>18.0</td>
<td>0.709</td>
<td>4448/1000</td>
<td>1490/335</td>
</tr>
</tbody>
</table>

**Mechanical Properties**

- **Minimum Bending Radius:**
  - Under installation: 20 × OD
  - During operation: 10 × OD

- **Temperature Range:**
  - Operating Temperature Range: -40°C (-40°F) to +70°C (+158°F)
  - Storage Temperature Range: -50°C (-58°F) to +70°C (+158°F)

- **Maximum Compressive Load:** 2000N
- **Repeated Impact:** 2.9 N.m (J) 3 × 2 impacts
- **Twist (Torsion):** 180 × 10 times, 125 × OD
- **Cyclic Flexing:** 25 cycles for armoured cables;
  - 100 cycles for unarmoured cables.
- **Crush Resistance:** 1485N/cm (850lb/in)
TIGHT BUFFER DISTRIBUTION PVC/LSZH JACKETED CABLE

Fiber Compliance

- Temperature Cycling: IEC60794-1-2-F2
- Tensile Strength: IEC60794-1-2-E1A
- Crush: IEC60794-1-2-E3
- Impact: IEC60794-1-2-E4
- Repeated Bending: IEC60794-1-2-E6
- Torsion: IEC60794-1-2-E7
- Kink: IEC60794-1-2-E10
- Cable Bend: IEC60794-1-2-E11
- Cool Bend: IEC60794-1-2-E11

Safety Compliance

- General Purpose Grade: Flammability Test: OFN(UL1581)
- Riser Grade: Flammability Test: OFNR/FT4 (UL1666)
- Plenum Grade: Flammability Test: OFNP/FT6(UL 910)
- FRPVC Grade: Flammability Test: IEC60332-1
- LSZH Grade: Halogen Content Test: IEC 60754-1
  - Acidity Test: IEC 60754; Smoke Emission Test: IEC61034-1/2
- LSFROH Grade: Halogen Content Test: IEC 60754-1
  - Acidity Test: IEC 60754; Smoke Emission Test: IEC61034-1/2
  - Flammability Test: IEC60332-1 & IEC 60332-3C/A
- FR Grade: Fire Resistance Test: IEC 60331 / BS 6387 CWZ

Standard Compliance

- GR409-CORE: TIA/EIA 568B.3 ICEA-S-83-596

Features

- Used in LAN and distribution applications where compact size and lightweight are required
- Suitable for both indoor and outdoor use - no need for splicing at the building entrance
- Flame-retardant or LSZH version for indoor installations
- Fungus-resistant, water-resistant, and UV-resistant for outdoor installations
- Cable can be armoured for additional protection in direct burial and aerial installations
- Highest specific strength-to-weight ratio for limited conduit space
- Economical for longer distance runs where cable cost is significant
- High quality tight-buffered coating on fiber for environmental and mechanical protection